Studies in the Genus Corticeus Pillar and Mitterpacher (Syn. Hypophloeus Fabricius) (Coleop.: Tenebrionidae).

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In the *Biologia Centrali-Americana* the generic term *Hypophloeus* Fab. has been submerged and replaced by *Corticeus* Piller and Mitterpacher. This change in nomenclature has been discussed in London at the British Museum, by Mr. K. G. Blair and Dr. Edwin C. Van Dyke very recently, while the latter was visiting and studying at that institution. Their research found the change correct. Mr. E. P. Van Duzee has also very kindly looked up the references and agrees fully with the acceptance of *Corticeus*. The following bibliographical references while not exhaustive, will be sufficient for any one to verify the above as given in the *Biologia* by Mr. Champion.

Genus Corticeus Pillar and Mitterpacher.

1783. *Corticeus* Piller et Mitterpacher, Iter per Poseganam Slavoniae, p. 87.
1870. *Corticeus* Crotch (= *Hypophloeus* Fab.), Trans. Ent. Soc. London, 4me. Série, 3, p. 46.
1886. *Corticeus* Champion, Biol. Centr.-Amer., Coleop. IV, pt. 1, June, p. 171.
1920. *Corticeus* ‡ Leng, Crotch, Trans. Ent. Soc. London, 3 (nec 1), p. 46.
1791. *Hypophloeus* (Hellwig.), Fabricius in Schneider's Neu Mag. Ent. i. 1., p. 24. Ent. Syst., i., p. 500.
1854. *Hypophloeus* Mulsant, Col. de France, Latigenes, p. 250.
1859. *Hypophloeus* Lacordaire, Gen. Col. V, p. 338.
1870. *Hypophloeus* Crotch, (*Corticeus* Pill.), Trans. Ent. Soc. London, 4th Series, 3, p. 47.
1870. *Hypophloeus* Horn, Amer. Philos. Soc., vol. XIV, p. 386. Rev. Tenebr. of Amer. N. of Mex.
1920. *Hypophloeus* Leng, Cat. Col. Amer. N. of Mex., p. 234.
1893. *Paraphloeus* Seidlitz, Naturg. Ins. Deutschl., V, 1893-1896, p. 553.

The study of the different specific phases of *Corticeus* is difficult on account of the lack of data concerning the identifi-

cation of sex. Without doubt a number of new species are awaiting differentiation and description. The species recently described by Mr. J. B. Wallis of Winnipeg, Manitoba, Canada (Can. Ent., LXV, Nov., 1933, pp. 247-249.) are valid.

It is desirable at the present time to describe the following as another addition to the genus:

Corticeus strublei new species.

Form somewhat stout, elongate, parallel and subcylindrical. Color moderately dark rufous; mesosternum, metasternum, parapleurae and epipleurae more or less nigro-piceous; abdomen somewhat tinged with piceous. Luster shining, head rather alutaceous.

Head distinctly triangular before the posterior border of the eyes, the latter moderate in size, facets rather coarse, arising abruptly from the surface, in prominence arcuately continuing the sides, the latter strongly convergent anteriorly and nearly straight, feebly sinuate across the oblique suture, very feebly reflexed; epistomal apex arcuato-truncate, angles obtusely rounded; frons convex anteriorly, epistoma less so, rather feebly and somewhat broadly impressed on the frontal suture, as well as within and parallel to the sides; interocular impression well marked between the posterior margins of the eyes; surface very finely punctate anteriorly, epistomal punctures more or less poorly defined, interocular impression and vertex more coarsely punctate. Labrum transverse, arcuate apically. Antennae moderate in stoutness, in length quite equal to width of pronotal apex; segments six, seven and eight widest and equal, seventh in width equal to one-seventh of the pronotal apex, fifth, ninth and tenth a little narrower and subequal, eleventh short oval and slightly narrower; second segment subquadrate, third slightly elongate and obconical, fourth subconical and as long as wide.

Pronotum as long as wide, apex arcuato-truncate between the short, slightly prominent and very narrowly rounded angles, one-seventh wider than the head; sides evenly and less than moderately arcuate, marginal beads fine and reflexed, submarginal impression scarcely widened apically and basally; base broadly and moderately arcuate, somewhat feebly sinuate laterally, about one-seventh wider than the apex, angles small, very distinct and rectangular; disk evenly and moderately strongly convex, beads clearly visible from above, rather coarsely punctate, punctures rather irregular, separated by a distance equal to one to three times their diameters, a narrow and smooth median line more or less evident. Prosternum and

prothoracic sides coarsely and densely punctate, punctures more or less coalescent and with some rugulae evident.

Elytra oblong and parallel, about twice as long as wide and fully two-and-one-seventh times as long as the pronotum; base transverse, humeri obtusely rectangular; sides straight, becoming gradually arcuate in apical third, continuously so with the broadly and moderately arcuate apex; disk feebly convex in the central area, gradually more strongly arcuate and precipitous laterally and apically; coarsely punctate as on the pronotum, punctures separated by a distance equal to one to four times their diameters, strial series not evident. Scutellum slightly transverse, sides straight and rather convergent basally; apex arcuate to slightly ogival, surface with few coarse and well defined punctures.

Mesosternum, metasternum and parapleurae densely punctate, punctures moderately coarse.

Abdomen moderately strongly convex, lateral impressions rather strong on last three segments; moderately strongly and closely punctate laterally and on first two segments, punctures smaller in the central area and on apical segments. First segment behind the coxae as long as the third, second slightly longer than the fifth and one-half longer than the fourth. Pygidium evenly punctate, punctures moderately small and strong.

Legs moderate in length and slenderness; metatibia as long as its femur, metatarsi about three-fifths as long as their tibia; fourth metatarsal segment a little longer than the first three together; second and third subequal, each about one-fifth as long as the fourth, first scarcely as long as the two following.

Measurements: (Type) Length 4 mm.; width 1.4 mm.

Holotype, female, No. 3723, in the collection of the Museum of the California Academy of Sciences. Sex determined by the protruded aedeaga. Collected at Pine crest, Marin County, California, from Red Fir (*Abies magnifica* Murr.), by G. R. Struble, to whom the species is dedicated. A pin label bears the number 191710. One identical female *paratype* taken with the type. Several smaller specimens are associated with the types, they were secured under the same conditions and time. Two of them have dark sterna and measure 3.2 mm. in length, and .9 mm. in width, one is a female. The males have not been identified, although one male has the aedeagus exposed and was collected at Cazadero, California. There are some differences in sculpturing which cannot be correlated.

Strublei is coarsely punctate, except on the front of the head where the punctures are very fine; the punctuation of the under surface of the body is dense and, typically the mesosternum, metasternum, parapleurae and epipleurae are more or less nigropiceous. *Strublei* is less convex than *glaber* Lec. and the pronotal apical angles are more prominent and narrowly blunt. In both *substriatus* Lec. and *parallelus* Melsh. the pronotal apical angles are larger, prominent and acute. In form *strublei* is larger (types) and somewhat stouter than *subopacus* Wallis. In the latter the head and prothorax are more or less piceous and alutaceous; the punctation is less coarse, distinctly coarser on the front of the head than in *strublei*, besides the pronotal apical angles are more broadly rounded.

Comments on the technique of orientation.

To correctly describe the outlines of the body of a species, when drafting a description, it is necessary, in order to obtain perfect symmetry, to have the line of vision at right angles to the transverse horizontal plane. This is particularly true of the pronotum. Its four angles must be on the same horizontal plane so that they shall appear equally well defined in the microscopic field. This is absolutely necessary for making camera lucida drawings. With proper orientation the pronotal apex, base and sides will then be as they should appear when viewed from above—in the position for correct description. For the larger species the microscope is not necessary and is replaced by the hand lens for ordinary work.

Applying the above rules, the apical and basal pronotal margins, will be in the best position for determining the degree of truncation or arcuation. To test out the fallacies that arise during careless examination note the following: should the apical margin be arcuate and the pronotal apex be gradually tilted upwards, it will be observed that the arcuation slowly disappears and is replaced by truncation; or should the apex be truncate, it will appear emarginate. So it is with the base when the inclination is reversed.

In the species of *Corticeus* belonging to the *tenuis* group, the pronota are of greater convexity anteriorly and the surface

arcuately declivous antero-laterally. Measured in the manner described above, the pronotal length on the median vertical plane, will be found to be greater than that of the sides from the apical to the basal angles. In the *parallelus* group the differences are less on account of the prominent apical angles and the more or less emarginate pronotal apex.

The above technique, when applied to *Corticeus occidentalis* Wallis, in which both the pronotal apex and base are arcuate, shows that the length on the median vertical plane is about one-fourth longer than the sides from the apical to the basal angles. A paratype and three other specimens of *Corticeus subopacus* Wallis, kindly given to me by my friend Ralph Hopping, have the pronotal apex transverse and the base arcuate; the difference in length on the median vertical plane, is about one-ninth greater than that of the sides from angle to angle. The difference in length is due to the basal arcuation.

Collecting Notes on Oeneis katahdin Newcomb (Lepid.: Satyridae).

By W. Prescott Rogers, Fall River, Massachusetts.

Mt. Katahdin is located in the central part of northern Maine. There are two good methods of approach by motor car. The first is from Bangor to Millinocket and then by the Sandy Stream tote road, on which road the civilian Conservation Corps did extensive work during the summer and autumn of 1933 so that it is now reasonably passable for automobiles. The other approach is by Greenville, Maine, down the Great Northern Paper Company's private road to Ripogenus Dam. The C.C.C. has also been working on this road. From this dam it parallels the Soudnahunk Stream, a branch of the Penobscot River, is known as the Soudnahunk-Millinocket tote road and joins the Sandy Stream tote road below Togue Pond Camp at a point designated on the maps as Pittman's Garage. This latter is a shed for the private storage of a few automobiles. It is in no sense a garage and nobody lives there.

The Hunt and the Abol trails, both of which start from the